

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A monomer protein comprising an amino acid sequence belonging to TGF- $\beta$  superfamily, of which cysteine related to a dimer formation of the protein has been replaced with another amino acid, wherein said monomer protein induces differentiation of osteoblasts as measured by alkaline phosphatase activity.
2. (Previously presented) The monomer protein according to claim 1, wherein another amino acid is an amino acid selected from the group consisting of serine, threonine, alanine and valine.
3. (Previously presented) The monomer protein according to claim 1, wherein another amino acid is alanine.
4. (Currently amended) A The monomer protein according to claim 1, comprising an amino acid sequence described in SEQ ID NO: 2 of the Sequence Listing.
5. (Withdrawn) A method for expression by using *Escherichia coli*, a yeast, an insect cell, or a mammal cell transformed with a plasmid comprising a DNA sequence that can express a monomer protein according to claim 1.

6. (Currently Amended) An agent comprising the monomer protein according to claim 1 ~~containing an effective amount of the monomer protein for preventing and treating a disease affecting bone and/or cartilage~~ in combination with an excipient.

7. (Currently Amended) The agent ~~for preventing and treating a disease affecting bone and/or cartilage~~ according to claim 6, wherein ~~the disease is~~ said monomer protein is in an amount sufficient to treat or inhibit osteoporosis.

8. (Currently Amended) The agent ~~for preventing and treating a disease affecting bone and/or cartilage~~ according to claim 6, wherein ~~the disease is~~ said monomer protein is in an amount sufficient to treat or inhibit osteoarthritis or arthroseitis.

9. (Currently Amended) The agent ~~for preventing and treating a disease affecting bone and/or cartilage~~ according to claim 6, wherein ~~the disease is~~ said monomer protein is in an amount sufficient to treat a bone fracture.

10. (Currently Amended) The agent ~~for preventing and treating a disease affecting bone and/or cartilage~~ according to claim 6, wherein ~~the disease is~~ said monomer protein is in an amount sufficient to treat a lack of root of teeth and a tooth socket.

11. (New) The agent according to claim 6, wherein said monomer protein is in an amount sufficient to induce differentiation of osteoblasts.

12. (New) A monomer protein comprising an amino acid sequence belonging to the TGF- $\beta$  superfamily, wherein a cysteine related to dimer formation of the protein has been replaced with an amino acid selected from the group consisting of alanine, serine, threonine and valine, wherein said monomer protein comprises an amino acid sequence described in SEQ ID NO:2 or an amino acid sequence described in SEQ ID NO:2 wherein alanine at position 83 is replaced with a serine, threonine or valine and wherein said monomer protein induces differentiation of osteoblasts measured by promoting alkaline phosphatase activity.

13. (New) The monomer protein according to claim 1, wherein said monomer protein is MP52.